

# Anti-MIF Antibody

Catalog # ABO10538

#### Specification

## Anti-MIF Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format **Description** Babbit IgG polyclona WB, IHC-P P14174 Rabbit Human, Mouse, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for Macrophage migration inhibitory factor(MIF) detection. Tested with WB,IHC-P in Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-MIF Antibody - Additional Information

Gene ID 4282

**Other Names** Macrophage migration inhibitory factor, MIF, 5.3.2.1, Glycosylation-inhibiting factor, GIF, L-dopachrome isomerase, L-dopachrome tautomerase, 5.3.3.12, Phenylpyruvate tautomerase, MIF, GLIF, MMIF

Calculated MW 12476 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization** 

Secreted. Cytoplasm. Does not have a cleavable signal sequence and is secreted via a specialized, non- classical pathway. Secreted by macrophages upon stimulation by bacterial lipopolysaccharide (LPS), or by M.tuberculosis antigens.

Protein Name Macrophage migration inhibitory factor(MIF)

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human MIF(98-115aa NYYDMNAANVGWNNSTFA), different from the related rat and mouse sequences by one amino acid.



**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the MIF family.

### Anti-MIF Antibody - Protein Information

Name MIF {ECO:0000303|PubMed:2552447, ECO:0000312|HGNC:HGNC:7097}

#### Function

Pro-inflammatory cytokine involved in the innate immune response to bacterial pathogens (PubMed:<a href="http://www.uniprot.org/citations/15908412" target="\_blank">15908412</a>, PubMed:<a href="http://www.uniprot.org/citations/17443469" target="\_blank">17443469</a>, PubMed:<a href="http://www.uniprot.org/citations/23776208" target="\_blank">23776208</a>, PubMed:<a href="http://www.uniprot.org/citations/23776208" target="\_blank">23776208</a>, PubMed:<a href="http://www.uniprot.org/citations/23776208" target="\_blank">23776208</a>, PubMed:<a href="http://www.uniprot.org/citations/23776208" target="\_blank">23776208</a>, PubMed:<a href="http://www.uniprot.org/citations/23776208" target="\_blank">23776208</a>). The expression of MIF at sites of inflammation suggests a role as mediator in regulating the function of macrophages in host defense (PubMed:<a

href="http://www.uniprot.org/citations/15908412" target="\_blank">15908412</a>, PubMed:<a href="http://www.uniprot.org/citations/17443469" target="\_blank">17443469</a>, PubMed:<a href="http://www.uniprot.org/citations/23776208" target="\_blank">23776208</a>). Counteracts the anti-inflammatory activity of glucocorticoids (PubMed:<a

href="http://www.uniprot.org/citations/15908412" target="\_blank">15908412</a>, PubMed:<a
href="http://www.uniprot.org/citations/17443469" target="\_blank">17443469</a>, PubMed:<a
href="http://www.uniprot.org/citations/23776208" target="\_blank">23776208</a>). Has
phenylpyruvate tautomerase and dopachrome tautomerase activity (in vitro), but the physiological
substrate is not known (PubMed:<a href="http://www.uniprot.org/citations/11439086"
target="\_blank">11439086</a>, PubMed:<a href="http://www.uniprot.org/citations/17526494"
target="\_blank">17526494</a>). It is not clear whether the tautomerase activity has any
physiological relevance, and whether it is important for cytokine activity (PubMed:<a
href="http://www.uniprot.org/citations/11439086" target="\_blank">11439086</a>, PubMed:<a
href="http://www.uniprot.org/citations/17526494"
target="\_blank">11439086</a>, PubMed:<a
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href="http://www.uniprot.org/citations/17526494"</a>).

**Cellular Location** 

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### Anti-MIF Antibody - Protocols

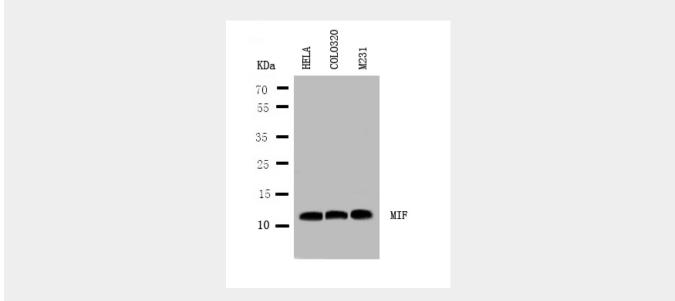
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-MIF Antibody - Images



Anti-MIF antibody, ABO10538, Western blottingLane 1: HELA Cell LysateLane 2: COLO320 Cell LysateLane 3: MM231 Cell Lysate

### **Anti-MIF Antibody - Background**

Macrophage migration inhibitory factor, MIF, is a cytokine released by T-lymphocytes, macrophages, and the pituitary gland that serves to integrate peripheral and central inflammatory responses. MIF gene has 3 exons separated by introns of only 189 and 95 bp, and covers less than 1 kb. Localization of the human gene for macrophage migration inhibitory factor(MIF) to chromosome 22q11.2 MIF plays a critical role in inflammatory diseases and atherogenesis.